

FIG. 1

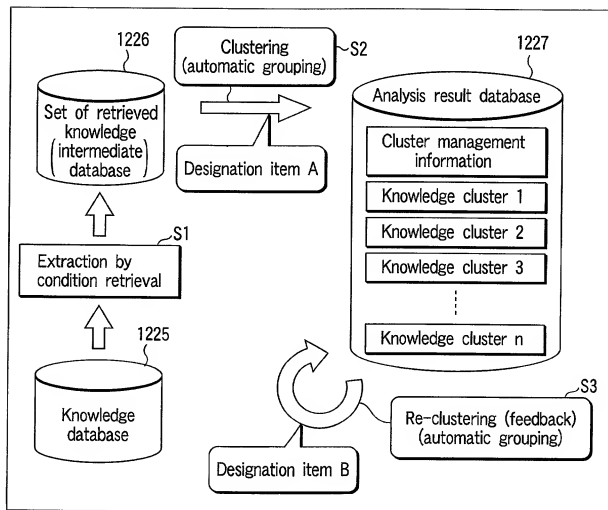


FIG. 2

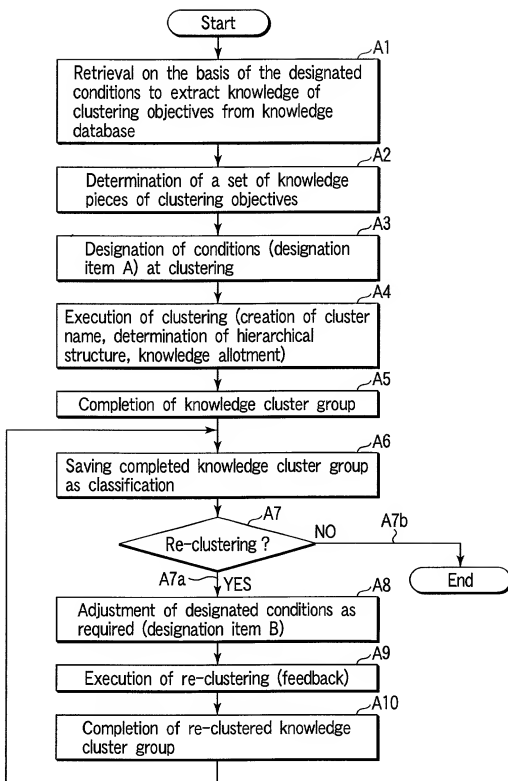


FIG. 3

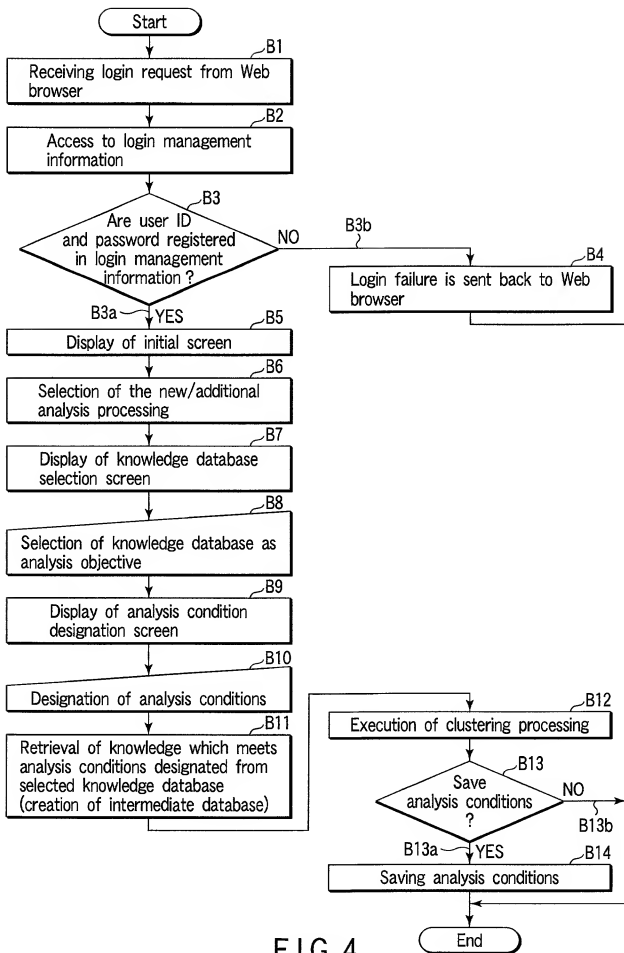


FIG. 4

Initial screen	Select the menu you want from the following menus	Enter
New/additional analysis processing	Select this when you want to carry out knowledge analysis newly, or to carry out additional knowledge analysis on the basis of existing analysis results	
Re-analysis/editing processing	Select this when you want to reconfigure existing analysis results, or to examine existing analysis results	

FIG.5

To analysis condition
designation screen in FIG. 7

Knowledge database : 6 cases			Select knowledge databases as analysis objectives	Select
<input type="checkbox"/> Objective	Knowledge database	Comment	The number of databases	
<input checked="" type="checkbox"/>	10,000 cases database (No.1	10225 cases)		
<input checked="" type="checkbox"/>	X×newspaper article (as of 1999	10000 cases)		
<input type="checkbox"/>	Faq2 (Faq2	1234 cases)		
<input type="checkbox"/>	MAGNIA_FAQ (MAGNIA_FAQ	5678 cases)		
<input type="checkbox"/>	Company information (collection of KYOCOS company information	555 cases)		
<input type="checkbox"/>	Support technical information (support technical information	4810 cases)		
		⋮		
		⋮		
		⋮		

FIG. 6

To Analysis condition saving screen in FIG. 8
 Extraction by condition retrieve (s1),
 Execution of clustering (s2)
 To analysis condition reading screen in FIG. 10

Analysis condition designation	Input analysis conditions	Enter
Analysis condition saving End	Analysis condition reading	
Analysis objective DB: • 10000 cases db (No.1 10225 cases)	• XXnewspaper article (as of 1999 10000 cases)	
Analysis result name:	Market trend analysis results of 10000 cases db & XXnewspaper articles (1996 to 2000)	
Analysis objective period:	January 1 1996 to December 31 2000	
Focusing keyword:	Tokyo New York London	
Number of focusing cases:	1000	
Number of hierarchies:	<input type="radio"/> 1-class layer <input checked="" type="radio"/> 2-class layer <input type="radio"/> 3-class layer <input type="radio"/> 4-class layer <input type="radio"/> n-class layer	
Overlap of knowledge:	<input checked="" type="radio"/> Present <input type="radio"/> Absent	
Maximum number of most significant clusters:	20	
Important word:	Market price Market Stocks Securities Pensions Economy Banks Money interests Currency	
Unnecessary word:	Sports Social issues Accidents	
Synonymous word:	NY = New York = NEW YORK; ●●● = ○○○○;	

FIG. 7

Saving analysis conditions

Analysis condition saving	Enter analysis condition name to save	Enter
Analysis condition name :	Market trend analysis results of 10000 cases db & XXnewspaper articles (1996 to 2000)	
Analysis objective period :	January 1, 1996 to December 31, 2000	
Focusing keyword :	Tokyo New York London	
Number of focusing cases :	1000 cases	
Number of hierarchies :	2-class hierarchy	
Maximum number of most significant clusters :	20 pieces	
Overlap of sentence :	Present	
Important word :	Market price Market Stocks Securities Pensions Economy Banks Money interests Currency	
Unnecessary word :	Sports Social issues Accidents	
Synonymous word :	NY = New York = NEW YORK; ●●● = ○○○○ ;	

FIG.8

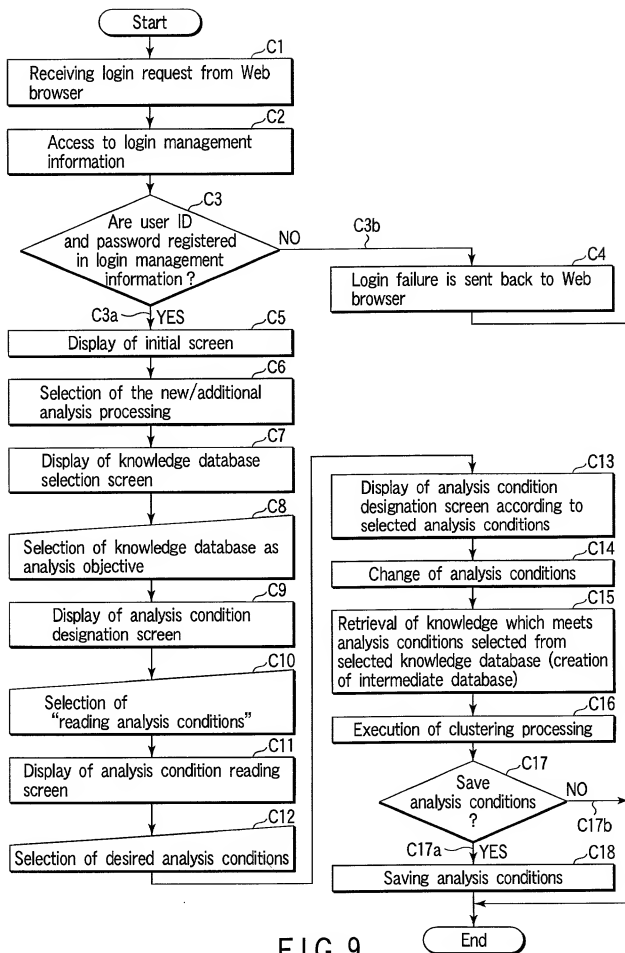


FIG. 9

Analysis conditions reading and to analysis
condition designation screen in FIG. 7

Analysis conditions reading : 4 cases in total		Select analysis conditions	Select
Objective	Analysis conditions	Date of creation	
<input checked="" type="radio"/> 10000 cases db & XXnewspaper article market trend analysis results		2001/01/01 00:23	
<input type="radio"/> Setting for <input checked="" type="radio"/> analysis of <input type="radio"/> DB		2001/02/02 09:20	
<input type="radio"/> CCCC		2001/03/03 18:00	
<input type="radio"/> DDDD		2001/04/01 22:00	
		...	

FIG. 10

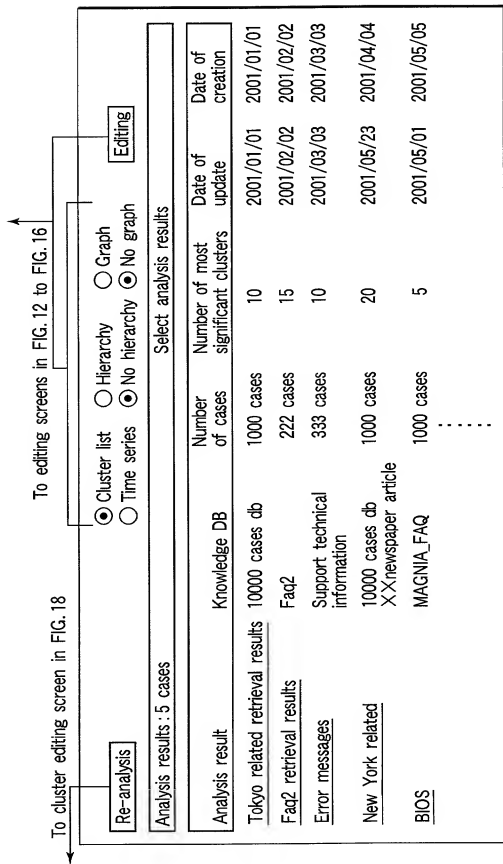


FIG. 11

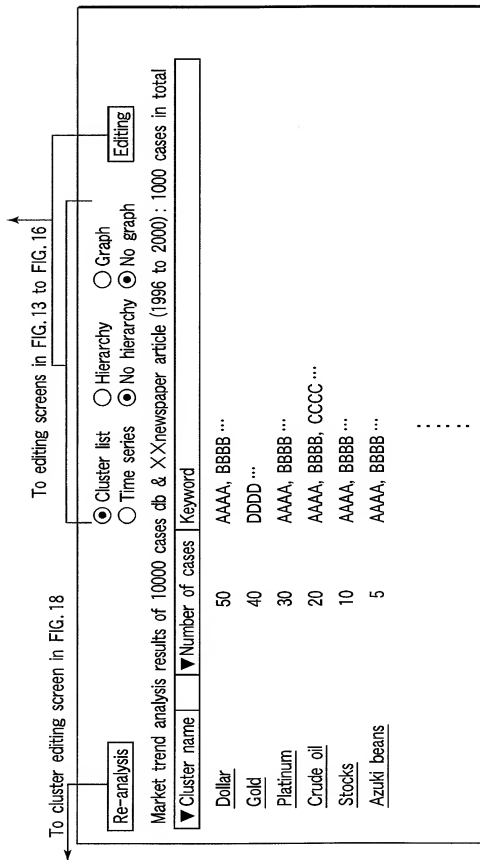


FIG. 12

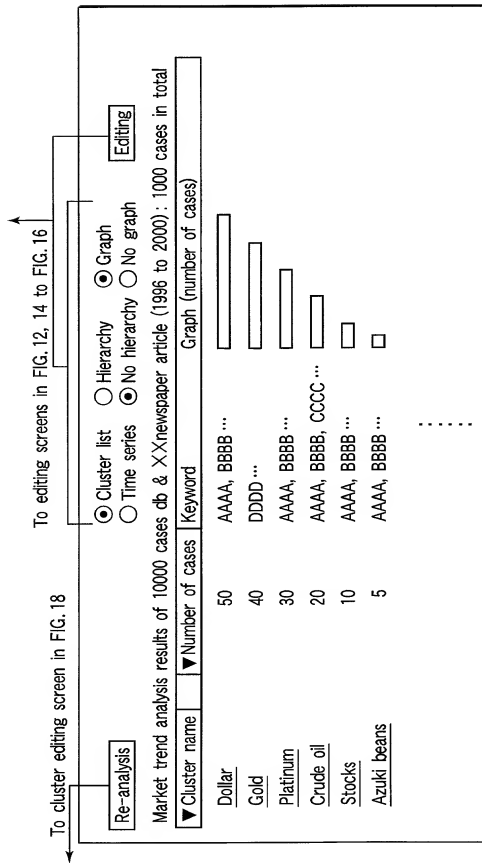


FIG. 13

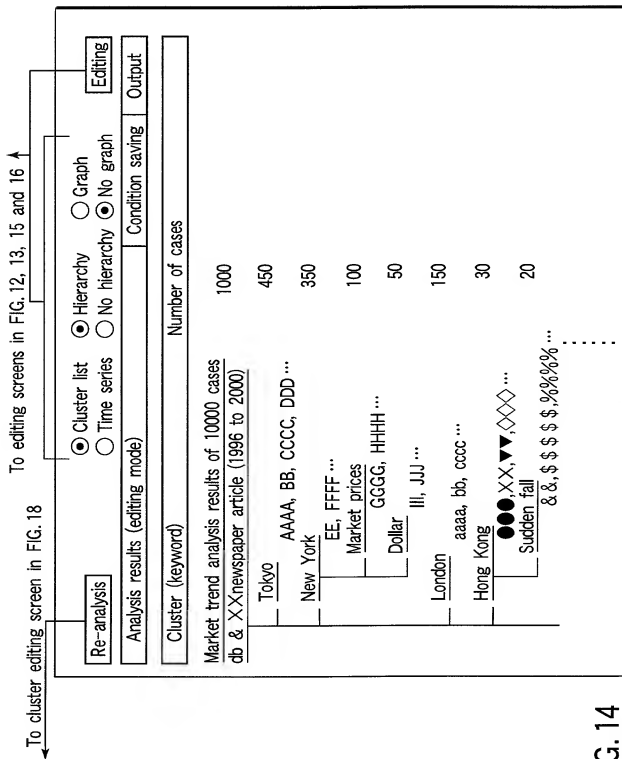


FIG. 14

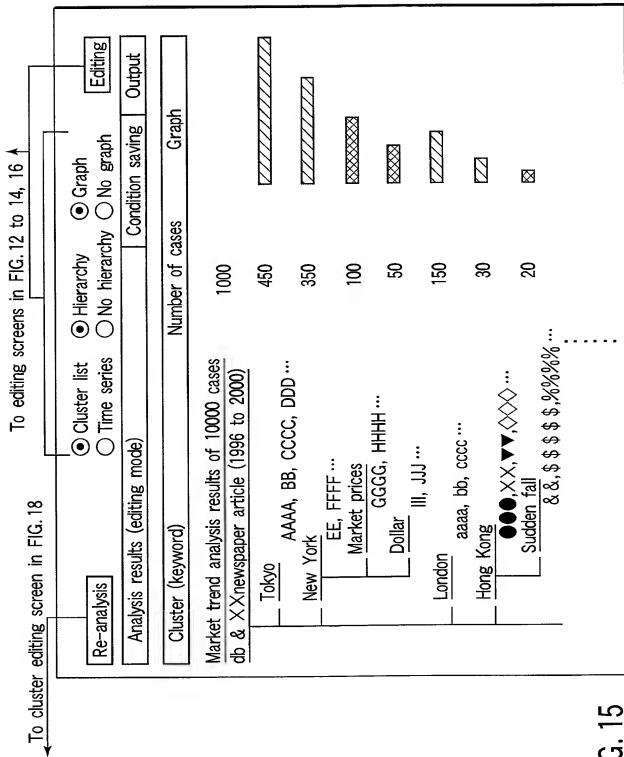


FIG. 15

To cluster editing screen in FIG. 18

To editing screens in FIG. 12 to FIG. 15

Re-analysis

☐ Cluster list ☐ Hierarchy ☐ Graph
☒ Time series ☐ No hierarchy ☐ No graph

Editing

Time series display Designate display range Display

Display unit: ☒ Monthly unit ☐ Daily unit Display range: January ▼ 1999 ▼

Market trend analysis results of 10000 cases db &
 XXnewspaper article (1996 to 2000) : 1000 cases in total
 New York → Market prices → Dollar : (50 cases)

Period	Cases	Graph
January, 1999	5(25)	
February, 1999	10(25)	
March, 1999	9(25)	
April, 1999	3(25)	
May, 1999	7(25)	
June, 1999	8(25)	
		⋮

FIG. 16

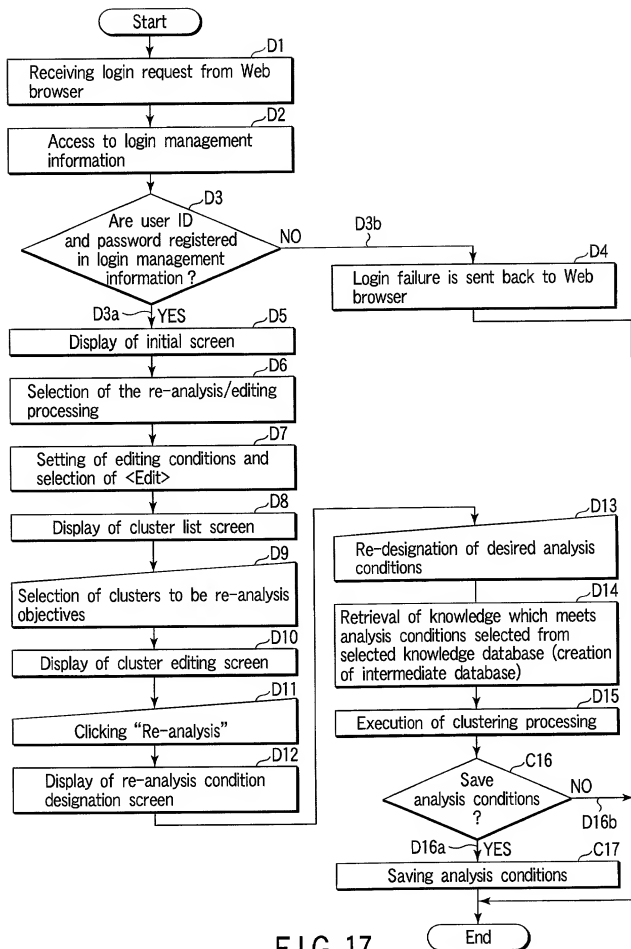


FIG. 17

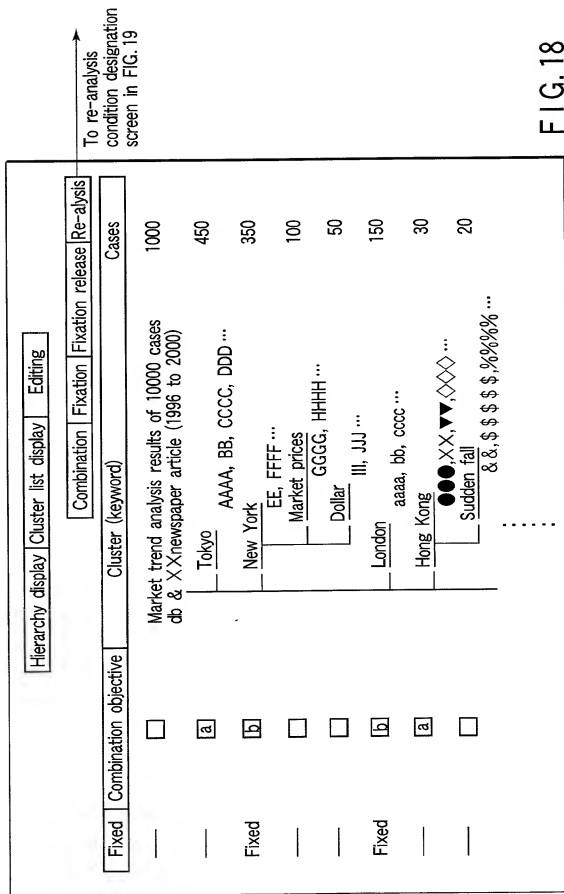


FIG. 18

Re-analysis processing	
Re-analysis condition designation	Input: analysis conditions
Analysis objective DB :	• 10000 cases db (No.1 10225 cases) • XXnewspaper article (as of 1999 10000 cases)
Analysis result name :	Market trend analysis results of 10000 cases db & XXnewspaper articles (1996 to 2000)
Analysis objective period :	January 1, 1966 to December 31, 2000
Focusing keyword :	Tokyo New York London
Number of focusing cases :	1000 cases
Number of hierarchies :	2-class layer
Overlap of knowledge :	Present
Maximum number of most significant clusters :	30 pieces
Important word :	Market price Market Stocks Securities Pensions Economy Banks Money interests Currency Monetary relaxation Bad loans
Unnecessary word :	Sports Social issues Accidents
Synonymous word :	NY = New York = NEW YORK; ●●● = ○○○ ;

FIG. 19

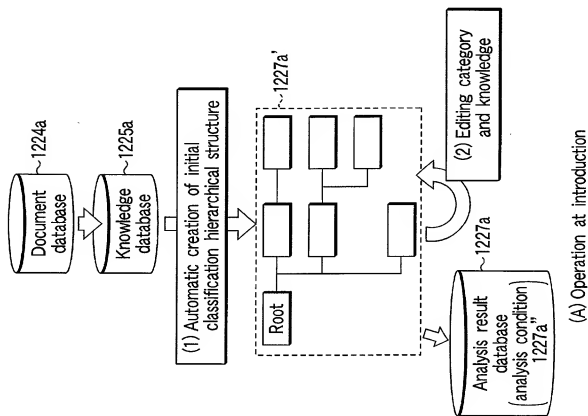


FIG. 20A

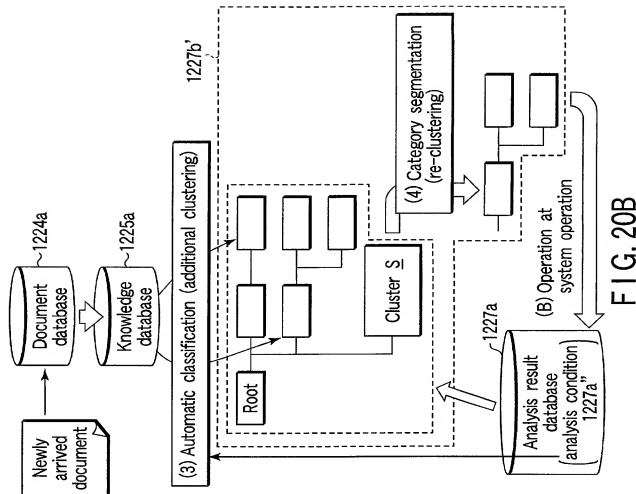


FIG. 20B

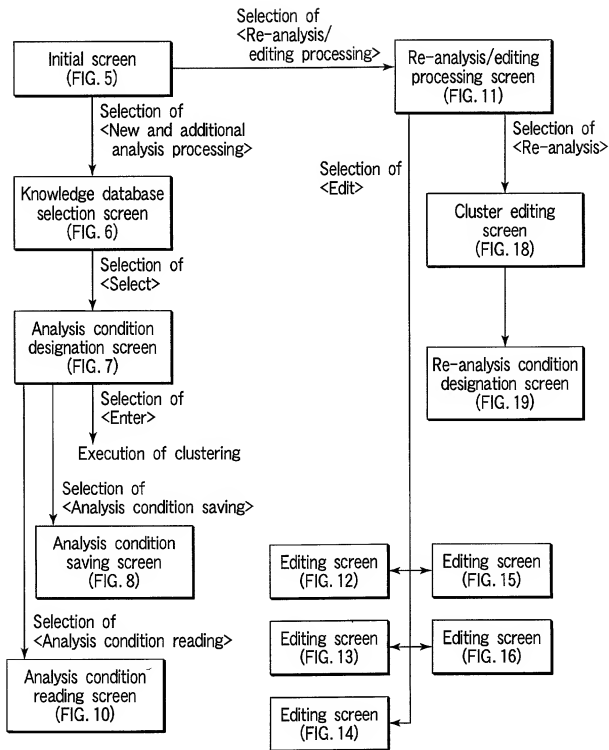


FIG. 21